

Final Project Report to NWMB – June 2022

- 1. NWSF Project Number: NWSF-2021-001**
- 2. Project Title:** Cumberland Sound beluga biopsy program
- 3. Project Leader:** George Qaqqasiq, Pangnirtung HTA Manager, Pangnirtung, NU, pang@baffinhto.ca, 867-473-8751
- 4. Summary:**

Aerial surveys suggest beluga whale abundance in Cumberland Sound is ~1380 individuals. It was suggested by Department of Fisheries and Oceans (DFO) that an annual harvest of 41 belugas may not be sustainable, since current evidence suggests this is a genetically and spatially segregated beluga population. However, the community hunts two types of belugas, and one of these types does not remain in Cumberland Sound year round. Hunters have historically collected beluga samples for the DFO sampling program, but the sample size has been too low for proper genetic testing, and we believe the second type of belugas are more common after the hunt is complete. To determine if whales from other populations visit Cumberland Sound, biopsy collections from these whales are needed. The proposed project aimed to collect biopsies from belugas in Cumberland Sound from August to September 2022 outside of Clearwater Fiord to target the other population of beluga.

5. Project Objectives:

Ricky Kilabuk was hired and aimed to collect biopsies from beluga whales outside of Clearwater Fiord in summer/fall of 2022.

6. Materials and Methods:

Crossbows and biopsy darts were used to biopsy beluga whales from the boat. Ricky was unable to locate beluga outside of Clearwater Fiord to biopsy in August-September 2022, possibly because of killer whales in the area. However, Ricky successfully collected a beluga biopsy in October 2022. This was the first season Ricky has attempted beluga biopsying and now that he has learned the technique, the plan is to collect biopsies this upcoming season, which will be analyzed for genetics by Fisheries and Oceans Canada.

7. Results

A single biopsy was collected and is currently being analyzed for genetics, along with hunter collected samples, by Fisheries and Oceans Canada.

8. Discussion/Management Implications:

Results of the genetic analyses may show a second population of beluga which would have management implications for the currently defined Cumberland Sound beluga stock.

9. Reporting to communities/resource users

Fisheries and Oceans Canada will be responsible for sharing the results of the genetic analyses with the Pangnirtung HTA and the community of Pangnirtung.